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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,310

07/18/2003

Hideo Mizuta

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08/02/2006

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

JEANGLAUDE, JEAN BRUNER

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,310

Applicant(s)

MIZUTA, HIDEO

Examiner

Jean B. Jeanglaude

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on amendment filed on 9-23-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**Remarks**

1. The indicated allowability of claims 1 - 12 is withdrawn in view of the newly discovered reference(s) to Yamaguchi et al. (USPGPUB 2002/0027192). Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi et al. (USPGPUB 2002/0027192).

4. Regarding claim 1, Yamaguchi et al. discloses a magnetic encoder (figs. 3, 6) for use in a wheel bearing that forms pulse train by means of a magnetic force and generates a code (abstract), wherein the magnetic encoder is formed by radially magnetizing a magnetic rubber ring with alternate S poles and N poles (fig. 6), wherein the magnetic rubber ring is formed by mixing a rubber material and a magnetic powder and wherein the magnetic powder is a rare earth magnetic powder ( paragraphs 0006,0023; figs. 3, 6).

5. Regarding claim 5, Yamaguchi et al. discloses a magnetic encoder for use in a wheel bearing that forms a pulse train by means of a magnetic force and generate a

code (abstract), wherein the magnetic encoder is formed radially magnetizing a magnetic rubber ring with alternate S poles and N poles (fig. 6) and wherein the magnetic rubber ring is formed by vulcanizing and adhering a magnetic rubber base in which unvulcanized rubber and rare earth magnetic powder are mixed to a reinforcement ring (abstract; paragraphs 0012, 0015, 0023).

6. Regarding claim 4, Yamaguchi et al. discloses a magnetic encoder (figs. 3, 6) wherein the magnetic rubber ring has a thickness in a range from 0.2 mm to 2.00 mm (figs. 3, 6; paragraph 0012).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 3, 6, 7, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (USPGPUB 2002/0027192) in view of Nakatsuka et al. (US Patent Number 6,304,162).

9. Regarding claims 2, 3, 6, 7, Yamaguchi et al. discloses all the limitations as discussed above but does not explicitly disclose a magnetic encoder wherein the rare earth magnetic powder comprises neodymium, iron, boron, samarium, and nitrogen. However, Nakatsuka et al., in a related field, discloses a magnetic encoder (figs. 3, 6) that comprises neodymium, iron, boron, samarium, nitrogen (col. 5, lines 30 – 38).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamaguchi et al.'s system with that of Nakatsuka et al. in order to provide a permanent magnet for a signal or attraction with attraction force.

10. Regarding claims 9, 10, Yamaguchi et al. discloses a magnetic encoder (figs. 3, 6) wherein the magnetic rubber ring has a thickness in a range from 0.2 mm to 2.00 mm (figs. 3, 6; paragraph 0012).

11. Regarding claims 8, 11, 12, Yamaguchi et al. discloses a magnetic encoder (figs. 3, 6) wherein the magnetic rubber ring that is vulcanized, molded and adhered to the reinforcement ring has a thickness in a range of 0.2 to 2.00 mm (figs. 3, 6; abstract; paragraph 0012).

#### Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jean Bruner Jeanglaude  
Primary Examiner  
July 25, 2006